



# UNITED STATES PATENT AND TRADEMARK OFFICE

80  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,505	05/04/2001	Gregory J. Wilson	291958157US1	8691
25096	7590	01/28/2005	EXAMINER	
PERKINS COIE LLP PATENT-SEA P.O. BOX 1247 SEATTLE, WA 98111-1247			PATEL, RAMESH B	
			ART UNIT	PAPER NUMBER
			2121	

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/849,505	WILSON ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Ramesh B. Patel	2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 December 2004.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 26-33 and 44-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 26-33 and 44-46 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 April 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/5/04 &amp; 10/22/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

1. Claims 26-33 and 44-46 are presented for examination. Claims 1-25, 34-43 and 47-57 are canceled as being nonelected claims and claims 26-33 and 44-46 are being elected without traverse as stated in the amendment filed on 9/27/2004.

**Claim Rejections - 35 USC § 112**

2. The rejection to claims 44-45 is withdrawn due to the amendment. Following is a new rejection to claim 33 under 35 USC 112, second paragraph and following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 33, lines 5-6, the limitations "a pre-deposition measuring subsystem....before material is deposited on the workpiece" and lines 7-8, "a pre-deposition measuring subsystem...after material is deposited on the workpiece" renders the claim indefinite because it is unclear whether the limitations "pre-deposition" should be same or different process. See MPEP § 2173.05(d).

Dependent claims, which are not particularly rejected, are rejected based on the rejected base claim. Applicant is suggested to review all claims and make appropriate correction without adding new matter to the disclosure and point out where changes made to the claims are supported in the original disclosure.

**Double Patenting**

3. Following is new rejection to claims 26-33 and 44-46 under 35 USC 101 due to the amendment.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 26-33 and 44-45 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 27-34 and 46-47 of copending Application No. 09/866,391. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only differences in the application and copending application are amended limitation(s) in

claims 26, 32-33 and 44-45 which include terms such as "an electrochemical deposition chamber instead of "a deposition chamber" and/or "workpiece(s)" instead of "wafer(s)"; these minor changes to the claims do not give patentable weight since deposition chamber is electrochemical deposition chamber and wafer is workpiece itself. Dependent claims 27-31 are same as claims 28-32 of copending application 09/866,391.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claim 46 of this application conflict with claim 48 of Application No. 09/866,391. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Claim 46 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 48 of copending Application No. 09/866,391. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

**Claim Rejections - 35 USC § 102**

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 26-33 and 44-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Lemelson (US Patent 5,871,805).

As to claims 26 and 33, Lemelson teaches the invention including a method and apparatus in a computing system for automatically configuring parameters controlling of an electrochemical deposition chamber to deposit material on each of a sequence of workpieces to improve conformity with a specified deposition pattern, comprising: for

each sequence of workpieces measuring thickness of the workpiece before and after material is deposited on the workpiece is taught as the a method for computerized control of vapor deposition processes including chemical vapor deposition and electron beam physical vapor deposition processes and provide computer analyzed information to yield optimum control points for the coating process wherein the parameters are measured at starting conditions and after coating process for coating thickness and other process variables (see, abstract and figure 3 and col. 8, line 57 to col. 9, line 31); for each of sequence of workpieces, configuring the parameters for depositing material on the workpiece based on the specified deposition pattern, the measured thickness of the current workpiece before material is deposited on the current workpiece, the measured thickness of the previous workpiece in the sequence before material is deposited on the previous workpiece, the parameters used for depositing material on the previous work piece and the measured thickness of the previous workpiece after material deposited on the previous workpiece (see, figures 1-3 and col. 4, line 52 to col. 5, line 15 and col. 6, lines 38-54 and col. 7, line 46 to col. 8, line 56).

As to claims 27-31, Lemelson teaches the method wherein the specified deposition pattern is a flat, concave and convex and an arbitrary radial profile is taught as the method for shaping or contouring one or more surfaces on an object(s) (see, abstract and col. 5, lines 42-47 and col. 6, lines 5-54).

As to claim 32, Lemelson teaches the method further comprising, for a second deposition chamber: retrieving a set of offset values characterizing differences between the electrochemical deposition chamber and the second electrochemical deposition chamber, modifying the parameters most recently configured for the electrochemical deposition chamber in accordance with the retrieved set of offset values to obtain a parameters for the second electrochemical deposition chamber and configuring the second electrochemical deposition chamber (see, figures 1-3 and col. 4, line 52 to col. 5, line 15 and col. 6, lines 38-54 and col. 7, line 46 to col. 8, line 56).

As to claims 44-46, Lemelson teaches the invention including one or more computer memories collectively containing a data structure for controlling an electrochemical deposition process, comprising a set of parameter values used in the electrochemical deposition process, the parameters having been generated by adjusting an earlier used set of parameters to resolve differences between measurements to a workpiece deposited using the earlier used set of parameters and a target deposition profile specified for the electrochemical deposition process and the contents of the data structure being usable to deposit an additional workpiece in greater conformance with the specified deposition profile wherein the electrochemical deposition process utilizes a plurality of electrodes and wherein each parameter value of the set is an amount of current to be delivered through one of the plurality of electrodes (see, abstract and figures 1-3 and col. 4, line 52 to col. 5, line 15 and col. 6, lines 38-54 and col. 7, line 46 to col. 8, line 56).

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh B. Patel whose telephone number is 703-308-6673 (new phone number after 10/14/2004 is 571-272-3688). The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179 (new phone number after 10/14/2004 is 571-272-3687). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ramesh B. Patel  
Primary Examiner  
Art Unit 2121  
*1/25/05*

rp